

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Paul R. Schmidt et al. Examiner: David Fidei

Serial No.: 10/691,726 Group Art Unit: 3728

Filed: October 22, 2003 Docket: 1443.063US1

For: PACKAGE FOR SEGREGATING AND MIXING SUBSTANCES

---

**APPEAL BRIEF UNDER 37 CFR § 41.37**

Mail Stop Appeal Brief- Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The Appeal Brief is presented in support of the Notice of Appeal to the Board of Patent Appeals and Interferences, filed on October 19, 2006, from the Final Rejection of claims 12-14, 17 and 40-45 of the above-identified application, as set forth in the Final Office Action mailed on May 4, 2006, and the Advisory Action mailed on October 23, 2006.

The Commissioner of Patents and Trademarks is hereby authorized to charge Deposit Account No. 19-0743 in the amount of \$500.00 which represents the requisite fee set forth in 37 C.F.R. § 41.20(b)(2). The Appellants respectfully request consideration and reversal of the Examiner's rejections of pending claims.

**APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

**TABLE OF CONTENTS**

|  | <u>Page</u> |
|--|-------------|
| <b><u>1. REAL PARTY IN INTEREST</u></b> .....                        | 2           |
| <b><u>2. RELATED APPEALS AND INTERFERENCES</u></b> .....             | 3           |
| <b><u>3. STATUS OF THE CLAIMS</u></b> .....                          | 4           |
| <b><u>4. STATUS OF AMENDMENTS</u></b> .....                          | 5           |
| <b><u>5. SUMMARY OF CLAIMED SUBJECT MATTER</u></b> .....             | 6           |
| <b><u>6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL</u></b> ..... | 7           |
| <b><u>7. ARGUMENT</u></b> .....                                      | 8           |
| <b><u>8. SUMMARY</u></b> .....                                       | 16          |
| <b><u>CLAIMS APPENDIX</u></b> .....                                  | 17          |
| <b><u>EVIDENCE APPENDIX</u></b> .....                                | 19          |
| <b><u>RELATED PROCEEDINGS APPENDIX</u></b> .....                     | 20          |

## **1. REAL PARTY IN INTEREST**

The real party in interest of the above-captioned patent application is the assignee,  
KIMBERLY-CLARK WORLDWIDE, INC.

## **2. RELATED APPEALS AND INTERFERENCES**

There are no other appeals or interferences known to Appellant that will have a bearing on the Board's decision in the present appeal.

### **3. STATUS OF THE CLAIMS**

The present application was filed on October 22, 2003, with claims 1-39. A non-final Office Action was mailed on November 1, 2005. A Final Office Action was mailed on April 19, 2006. Claims 12-14 and 17 stand twice rejected. Claims 40-45 were filed on May 24, 2006 in response to the Final Office Action and have only been rejected once. However, they have been accepted for appeal per the Advisory Action mailed October 23, 2006. Therefore, claims 12-14, 17 and 40-45 are the subject of the present appeal.

#### **4. STATUS OF AMENDMENTS**

The claims were amended in Appellants' Amendment filed May 24, 2006, in response to the Final Office Action mailed April 19, 2006.

## **5. SUMMARY OF CLAIMED SUBJECT MATTER**

FIGS. 4-6 illustrate an example package 50. The package 50 includes a gas-permeable enclosure 51 as well as a first solid substance 54 and a second solid substance 55 that are stored within the enclosure 51 (see FIG. 5). The package 50 further includes a mechanism 58 (e.g., a plastic zipper) that segregates the first solid substance 54 from the second solid substance 55. Opening the mechanism 58 allows the first solid substance 54 and the second solid substance 55 to be mixed together inside the gas-permeable enclosure 51 (see FIG. 6). The mechanism 58 may segregate the gas-permeable enclosure 51 into two compartments that are of equal size, unequal size, or into more than two compartments.

As an example, the first solid substance 54 includes ferric chloride and the second solid substance 55 includes sodium chlorite which produce a gas 56 (i.e., chlorine dioxide) when mixed together. The gas-permeable enclosure 51 allows the gas 56, which is produced by mixing the first solid substance 54 with the second solid substance 55, to permeate through the gas-permeable enclosure 51 without rupturing the enclosure.

The gas-permeable enclosure 51 may be formed of a first layer 61 and a second layer 62. In some forms of the package 50, the package 50 further includes a first tab 67 that is attached to an outer surface 65 of the first layer 61 and a second tab 68 that is attached to an outer surface 69 of the second layer 62. In the illustrated example package 50, the first tab 67 and the second tab 68 are adjacent to the plastic zipper 58.

It should be noted that only a portion of one, or both, of the first and second layers 61, 62 may be formed of a gas-permeable material, such as a film having apertures. In some example forms, a portion of the enclosure 51 may be transparent to facilitate observing the degree of mixing between the first solid substance 54 and the second solid substance 55.

This summary does not provide an exhaustive or exclusive view of the present subject matter, and Appellant refers to the appended claims and its legal equivalents for a complete statement of the invention.

## **6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Claims 12 and 13 were rejected under 35 USC § 102(e) as being anticipated by Ward (US 5,087,273).

Claims 12-14 were rejected under 35 USC § 103(a) as being unpatentable over Renner (WO 95/953237) in view of Holzner (US 4,534,509).

Claims 12-14 were rejected under 35 USC § 103(a) as being unpatentable over Renner (WO 95/953237) in view of Muysson (US 5,164,178).

Claim 17 was rejected under 35 USC § 103(a) as being unpatentable over Renner (WO 95/953237) in view of Holzner (US 4,534,509) as applied to claims 12-14 above, and further in view of Detrie et al. (US 2,916,197).



## **7. ARGUMENT**

### **A) The Applicable Law under 35 U.S.C. §102(b)**

A claim is anticipated only if each and every element set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *M.P.E.P.* '2131. To anticipate a claim, a reference must disclose every element of the challenged claim and enable one skilled in the art to make the anticipating subject matter. *PPG Industries, Inc. V. Guardian Industries Corp.*, 75 F.3d 1558, 37 USPQ2d 1618 (Fed. Cir. 1996). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

### **B) The Applicable Law under 35 U.S.C. §103(a)**

To sustain a rejection under 35 U.S.C. 103, references must be cited that teach or suggest all the claim elements. *M.P.E.P.* § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)). In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); *Schenck v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983); *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143, 227 USPQ 543, 551 (Fed. Cir. 1985); MPEP § 2141.02.

Further, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Appellant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991); MPEP § 2143. The Examiner must avoid hindsight. *In re Bond*, 910 F.2d 831, 834, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990). The Office Action must further provide specific, objective evidence of record for a finding of a suggestion or motivation to combine reference teachings and must explain the reasoning by which the evidence is deemed to support such a finding. *In re Sang Su Lee*, 277 F.3d 1338, 61 USPQ2d 1430 (Fed. Cir. 2002).

**C) Discussion of the rejection of Claims 12 and 13 under 35 USC § 102(e) as being anticipated by Ward (US 5,087,273).**

Claims 12 and 13 were rejected under 35 USC § 102(e) as being anticipated by Ward (US 5,087,273). Appellants have attempted throughout prosecution to demonstrate that not all elements of the pending claims are present in the cited reference. Appellants respectfully submit that the absence of various elements in the pending claims was not addressed in the Final Office Action. Even after reviewing the Examiner's comments in the Advisory Action, Appellants still can not find in the cited reference several of the features described in many of the claims.

As part of the rejection of claims 12 and 13, the Examiner states at page 2 of the Final Office Action that "the enclosure is capable of functioning as claimed 'wherein' opening the stitching mechanism 6 allows mixing of said first solid substance with said second solid substance inside said gas-permeable enclosure." Appellants respectfully traverse this assertion.

Appellants can not find any teaching or suggestion in Ward that the stitching mechanism 6 is opened (or is even capable of being opened). Appellants respectfully direct attention to column 3, lines 48-62 of Ward which appears to teach away from opening the stitching mechanism 6. Appellants note that column 3, lines 48-62 of Ward describe permanently securing opposite faces of the envelope together.

Therefore, Appellants respectfully submit that Ward does not teach or suggest a package that includes "a mechanism segregating said first solid substance from said solid second substance, wherein opening said mechanism allows mixing of said first solid substance with said second solid substance inside said gas-permeable enclosure" as recited in claim 12. Claim 13 depends from claim 12, and is patentable over Ward for the reasons argued above, plus the elements in the claims.

**D) Discussion of the rejection of Claims 12-14 under 35 USC § 103(a) as being unpatentable over Renner (WO 95/953237) in view of Holzner (US 4,534,509).**

Claims 12-14 were rejected under 35 USC § 103(a) as being unpatentable over Renner (WO 95/953237) in view of Holzner (US 4,534,509). Appellants respectfully traverse the rejection because the combination of Renner and Holzner does not describe each and every

element of the claimed invention, and there is no motivation or suggestion to combine Renner and Holzner.

***1. Renner and Holzner do not teach or suggest every element of claims 12-14***

The Examiner appears to acknowledge that Renner does not disclose a gas-permeable enclosure as recited in claim 12 by stating at page 4 of the Final Office Action that “[t]he difference between the claimed subject matter and Renner reside in a gas-permeable enclosure that permits permeation without rupture.”

The Examiner attempts to overcome the acknowledged deficiencies of Renner by combining Renner with Holzner. The Examiner states at page 4 of the Office Action that “Holzner col. 2, lines 50-59, states a pouch made of a polymer material has been developed that permits diffusion of gas therethrough.” Appellants note that Holzner does not describe mixing the substances that are contained in the superposed devices 2.

As shown in the bottom portion of FIGS. 1 and 2 and the right portion of FIGS. 3 and 4 of Holzner, the superposed devices 2 are separated so that the substances within the respective devices 2 can permeate through the respective diffusion walls 6 once both devices 2 are separated from one another after being removed from a hermetically sealed bag where the devices 2 are stored. Appellants note that the hermetically sealed bag is only described in the specification of Holzner and not shown in the FIGS.

Appellants can not find in Holzner an enclosure that segregates a first substance from a second substance yet permits opening the enclosure to allow the first substance and the second substance to be mixed together inside an enclosure. Therefore, Appellants respectfully submit that the combination of Renner and Holzner does not teach or suggest a mechanism and gas-permeable enclosure as recited in claim 12. Appellants specifically note that neither Renner nor Holzner teach or suggest a package that includes:

“a mechanism segregating said first solid substance from said solid second substance, wherein opening said mechanism allows mixing of said first solid substance with said second solid substance inside said gas-permeable enclosure, said gas-permeable enclosure allowing a gas that is produced by mixing said first solid substance with said second solid substance to permeate through said gas-permeable enclosure without rupturing said gas-permeable enclosure while

retaining said first solid substance and said second solid substance within said gas-permeable enclosure” as recited in claim 12.

## **II. *There is no motivation or suggestion to combine Renner and Holzner***

Notwithstanding the fact that the combination of references fails to establish all of the elements of the claims, Appellants respectfully submit that the rejection fails to establish a legally sufficient motivation to combine the references. To do that the Examiner must show that some objective teaching in the prior art or some knowledge generally available to one of ordinary skill in the art would lead an individual to combine the relevant teaching of the references. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

The Office Action states at pages 4-5 of the Final Office Action that “[i]t would have been obvious to one of ordinary skill in the art to modify the plastic foils of Renner by employing a diffusing polymer as taught by the prior art statement in Holzner, in order to provide a release of gas build up without the need of constructing a separate rupturable chamber.” Appellants respectfully traverse this assertion.

The Office Action must provide specific, objective evidence of record for a finding of a suggestion or motivation to combine reference teachings and must explain the reasoning by which the evidence is deemed to support such a finding. *In re Sang Su Lee*, 277 F.3d 1338, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002). Mere conclusory statements are unsatisfactory.

“With respect to Lee’s application, neither the examiner nor the Board adequately supported the selection and combination of the Nortrup and Thunderchopper references to render obvious that which Lee described. The examiner’s conclusory statements that ‘the demonstration mode is just a programmable feature which can be used in many different devices for providing automatic introduction by adding the proper programming software’ and that ‘another motivation would be that the automatic demonstration mode is user friendly and it functions as tutorial’ do not adequately address the issue of motivation to combine. This factual question of motivation is material to patentability, and could not be resolved on subjective belief and unknown authority. It is improper, in determining whether a person of ordinary skill in the art would have been lead to this combination of references, simply to use ‘[use] that which the inventor taught against its teacher.’ *W.L. Gore V. Garlock, Inc.*, 721 F. 2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983).” *Lee*, at 1343, 1344.

Appellants respectfully submit that the Examiner's statement regarding motivation is analogous to the inadequate conclusory statements made by the Examiner and Board in the *In re Lee* case. It is respectfully submitted that the Examiner's assertion as to motivation amounts to a form of Official Notice.

In addition, Appellants note that (i) Holzner does not have any teaching as to mixing components within an enclosure; and (ii) Renner only teaches an enclosure that includes a cross piece 12 that must be ruptured for gas to escape from the chamber 10, 20. Appellants respectfully submit that the only teaching or suggestion relating to a mechanism and a gas-permeable enclosure as recited in claim 12 is found in Appellants' disclosure.

**E) Discussion of the rejection of Claims 12-14 under 35 USC § 103(a) as being unpatentable over Renner (WO 95/953237) in view of Muysson (US 5,164,178)**

Claims 12-14 were rejected under 35 USC § 103(a) as being unpatentable over Renner (WO 95/953237) in view of Muysson (US 5,164,178). Appellants respectfully traverse the rejection because the combination of Renner and Muysson does not describe each and every element of the claimed invention, and there is no motivation or suggestion to combine Renner and Muysson.

***I. Renner and Muysson do not teach or suggest every element of claims 12-14***

The Examiner again appears to acknowledge that Renner does not disclose a gas-permeable enclosure as recited in claim 12 by stating at page 5 of the Final Office Action that "[t]he difference between the claimed subject matter and Renner reside in a gas-permeable enclosure that permits permeation without rupture."

The Examiner attempts to overcome the acknowledged deficiencies of Renner by combining Renner with Muysson. Appellants note that Muysson does not describe segregating and then mixing the substances that are contained in the disclosed pouch 1 (see FIG. 4 of Muysson).

Appellants can not find Muysson an enclosure that segregates a first substance from a second substance yet permits opening the enclosure to allow the first substance and the second substance to be mixed together inside the enclosure. Therefore, Appellants respectfully submit

that the combination of Renner and Muysson does not teach or suggest a mechanism and gas-permeable enclosure as recited in claim 12. Appellants specifically note that Renner and/or Muysson do not teach or suggest a package that includes:

“a mechanism segregating said first solid substance from said solid second substance, wherein opening said mechanism allows mixing of said first solid substance with said second solid substance inside said gas-permeable enclosure, said gas-permeable enclosure allowing a gas that is produced by mixing said first solid substance with said second solid substance to permeate through said gas-permeable enclosure without rupturing said gas-permeable enclosure while retaining said first solid substance and said second solid substance within said gas-permeable enclosure” as recited in claim 12.

**II. *There is no motivation or suggestion to combine Renner and Muysson***

Notwithstanding the fact that the combination of references fails to establish all of the elements of the claims, Appellants respectfully submit that the rejection fails to establish a legally sufficient motivation to combine the references. The Final Office Action states at page 7 that “[t]o provide the device of Renner with a plurality of apertures would have been an art recognized equivalent manner of venting gas as evidenced by Muysson.” Appellants respectfully traverse this assertion.

Appellants similarly respectfully submit that the Examiner’s statement is analogous to the conclusory statements made by the Examiner and Board in the *In re Lee* case (see quote from *Lee* case above). It is respectfully submitted that the Examiner’s assertion as to motivation amounts to a form of Official Notice.

In addition, Appellants note that (i) Muysson does not have any teaching as to segregating and then mixing components within an enclosure; and (ii) Renner only teaches an enclosure that includes a cross piece 12 that must be ruptured for gas to escape from the chamber 10, 20. Appellants again respectfully submit that the only teaching or suggestion relating to a mechanism and a gas-permeable enclosure as recited in claim 12 is found in Appellants’ disclosure.

**F) Discussion of the rejection of Claim 17 under 35 USC § 103(a) as being unpatentable over Renner (WO 95/953237) in view of Holzner (US 4,534,509) as applied to claims 12-14 above, and further in view of Detrie et al. (US 2,916,197)**

Claim 17 was rejected under 35 USC § 103(a) as being unpatentable over Renner (WO 95/953237) in view of Holzner (US 4,534,509) as applied to claims 12-14 above, and further in view of Detrie et al. (US 2,916,197). Appellants respectfully traverse the rejection because the combination of Renner, Holzner and Detrie does not describe each and every element of the claimed invention, and there is no motivation or suggestion to combine Renner, Holzner and Detrie.

**I. Renner, Holzner and Detrie do not teach or suggest every element of claim 17**

As part of making the rejection, the Examiner states at page 6 of the Final Office Action that “[t]he difference between the claimed subject matter resides in a zipper segregating the first substance from the second substance along with a tab attached to the each layer of the package.” Appellants respectfully traverse the above assertion because as discussed above, the combination of Renner and Holzner does not teach or suggest a mechanism and gas-permeable enclosure as recited in claim 12.

In addition, Appellants respectfully submit that Detrie does not teach or suggest “a gas-permeable enclosure” because the only way that the resin mixing process disclosed in Detrie (see Detrie at col. 5, lines 32-34) makes sense is for bag 12 to be impermeable to gas. The bag 12 needs to be impermeable to gas or undesirable hardening of the mixture (or pre-mixed components) will occur before the mixture is dispensed from the bag 12. Appellants further note that Detrie teaches at col. 3, line 21 using materials that “are impervious to humidity”.

Therefore, the cited combination of Renner, Holzner and Detrie does not appear to teach or suggest a package that includes:

“a mechanism segregating said first solid substance from said solid second substance, wherein opening said mechanism allows mixing of said first solid substance with said second solid substance inside said gas-permeable enclosure, said gas-permeable enclosure allowing a gas that is produced by mixing said first solid substance with said second solid substance to permeate through said gas-permeable enclosure without rupturing said gas-permeable enclosure while

retaining said first solid substance and said second solid substance within said gas-permeable enclosure” as recited in claim 12.

Claim 17 depends from claim 12, and is patentable over Renner, Holzner and/or Detrie for the reasons argued with regard to claim 12, plus the elements in the claim.

**II. *There is no motivation or suggestion to combine Renner, Holzner and Detrie***

The Office Action states at page 6 that “[i]t would have been obvious to one of ordinary skill in the art to modify the package of Renner by employing a zipper as taught by Detrie et al, in order to permit a more easily grasped and separated compartment.” Appellants respectfully traverse this assertion.

Appellants similarly respectfully submit that the Examiner’s statement is analogous to the conclusory statements made by the Examiner and Board in the *In re Lee* case (see quote from *Lee* case above). In addition, Applicant notes that Detrie teaches away from any type of “gas-permeable enclosure” because undesirable hardening of the mixture (or pre-mixed components) would occur before the mixture is dispensed from the bag 12.



## 8. SUMMARY

It is respectfully submitted that the art cited does not render claims 12-14, 17 and 40-45 anticipated or obvious and that the claims are patentable over the cited art. Reversal of the pending rejections and allowance of the pending claims are respectfully requested.

Respectfully submitted,

PAUL R. SCHMIDT et al.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  
P.O. Box 2938  
Minneapolis, MN 55402

Date 11-20-06

By

Andrew Peret

Andrew R. Peret

Reg. No. 41,246

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 20 day of November 2006.

CANDIS BUENDING

Name

Signature

Candis Buending

### CLAIMS APPENDIX

12. A package comprising:  
a gas-permeable enclosure;  
a first solid substance within said gas-permeable enclosure;  
a second solid substance within said gas-permeable enclosure; and  
a mechanism segregating said first solid substance from said solid second substance,  
wherein opening said mechanism allows mixing of said first solid substance with said second  
solid substance inside said gas-permeable enclosure, said gas-permeable enclosure allowing a  
gas that is produced by mixing said first solid substance with said second solid substance to  
permeate through said gas-permeable enclosure without rupturing said gas-permeable enclosure  
while retaining said first solid substance and said second solid substance within said gas-  
permeable enclosure.
13. The package of claim 12 wherein said gas-permeable enclosure is a film having  
apertures.
14. The package of claim 12 wherein said first solid substance includes ferric chloride  
impregnated into zeolite particles and said solid second substance includes sodium chlorite  
impregnated into zeolite particles.
17. The package of claim 12 wherein said enclosure is formed of a first layer and a second  
layer, and the package further comprises:  
a first tab attached to an outer surface of said first layer; and  
a second tab attached to an outer surface of said second layer.
40. The package of claim 12 wherein a portion of said enclosure is transparent.

41. The package of claim 12 wherein said enclosure is formed of a first layer and a second layer.

42. The package of claim 41 wherein said first and second layers each include a perimeter, said perimeter of said first layer being sealed to said perimeter of said second layer to form said enclosure.

43. The package of claim 17 wherein said first tab and said second tab are adjacent said mechanism.

44. The package of claim 12 wherein said mechanism segregates said enclosure into two compartments that are of equal size.

45. The package of claim 12 wherein said mechanism is a plastic zipper.

## **EVIDENCE APPENDIX**

None.

**RELATED PROCEEDINGS APPENDIX**

None.